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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/817,475	04/02/2004	Jung Hee Lee	9951-003US	3214
22897	7590	12/05/2006	EXAMINER	
DEMONT & BREYER, LLC			SASTRI, SATYA B	
100 COMMONS WAY			ART UNIT	
HOLMDEL, NJ 07733			PAPER NUMBER	

1713
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DATE MAILED: 12/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/817,475	LEE ET AL.	
	Examiner	Art Unit	
	Satya B. Sastri	1713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,6 and 8-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 6, 8-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This office action is in response to amendment filed on November 21, 2006. *Claims 1, 6, 8-21* are now pending are now pending in the application.

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 21, 2006 has been entered.

3. In view of the amendment and arguments presented, rejection of *claims 1, 6, 8-21* under 35 U.S.C. 103(a) as being unpatentable over Kojima et al. (US 5,338,780) in view of Lee (KR 9204784 B) is withdrawn. However, rejection of *claims 1, 6, 8-21* under 35 U.S.C. 103(a) as being unpatentable over Lee (KR 9204784 B) in view of Kojima et al. (US 5,338,780) is sustained for the reasons given below.

### *Claim Objections*

4. *Claim 1* is objected to because of the following informalities: The scope of the claim is confusing because it is unclear as what dibutyl acrylate refers to. While dibutyl diacrylate is one

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possibility, dibutyl phthalate is the other commonly used compound in adsorption studies with carbon black.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

5. ***Claims 1, 6, 8-21*** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Instant claims recite the phrase "said polyolefins may be..". Such a phrase is indefinite as it is not clear if other polyolefins are also included.

### ***Response to Arguments***

6. Applicants argue that the prior art Lee does not teach or suggest carbon black with a particle size of 60 nm or less, a surface area of 80-200 m<sup>2</sup>/g and a dibutyl acrylate adsorption of 10-200 cm<sup>3</sup>/100g. Applicants emphasize that Lee does not even mention carbon black with the recited adsorption range. It is noted that Lee explicitly discloses a particle size of 20-30 nm and a surface area in the range of 90-110 m<sup>2</sup>/g. Both these ranges are contained within the ranges recited in instant claims. With regard to the adsorption value, it is the examiner's position that adsorption is a surface phenomenon and is directly dependent on the surface area. The chemical and functional characteristics of the carbon black surface are not elaborated in the instant

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disclosure as being responsible for the adsorption value. The surface area recited in instant claims reads on the prior art surface area range. The examiner believes that the converse must be true, i.e. the adsorption value of the prior art carbon black must intrinsically be within the instantly claimed range absent evidence to the contrary.

Applicants also contend that the carbon black in Lee is not used to achieve tracking resistance of cable as in the present invention. It is noted that the claims are directed to a composition comprising carbon black. The amount of carbon and the physical characteristics of carbon black (useful range, particle size and surface area) in the prior art and the instant invention are the same. The presence of carbon black will result in all the advantages associated with carbon black, i.e. carbon black of Lee will account for the black color with effective dispersion in the resin as well as the tracking resistance.

### ***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Satya Sastri at (571) 272 1112.

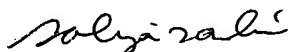
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached at (571) 272 1114.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273 8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

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may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



SATYA SASTRI

December 4, 2006



DAVID W. WU  
SUPERVISORY PATENT EXAMINER  
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